ABSTRACT

RESEARCH PAPER	The Effect of Exercise and Extended-Release Niacin On C-Reactive Protein and Lipoprotein (a) Levels In Individuals With Type II Diabetes
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The purpose of the study was to determine the effect of regular aerobic exercise and extended release niacin on C-reactive protein levels and lipoprotein (a) concentrations in individuals with type II diabetes in the management of dyslipidemia. Participants underwent a 16-week exercise training program which involves cardiovascular fitness and resistant training, in addition to taking Niaspan® used in the treatment of dyslipidemia. A total of 27 participants were recruited, but 19 completed the study. CRP had no significant changes across the whole group ($p=0.48$), but a sub-group was populated with 10 subjects with high risk levels at baseline (>3mg/L). This sub-group showed significant decrease ($p<0.014$) after 16 weeks of exercise training and niacin intervention. No significant differences were noted from baseline Lp(a) ($p=0.47$), and HbA1c. Although no significant changes were noted, monthly blood sugars declined over the course of the 4 months.

Even though the results did not show any significant changes across the variables, there was significant change in C- reactive protein levels in individuals with high baseline levels. The intervention was safe and showed improved adaptations related to exercise training in this high risk population and slight improvements in glucose control.